PATENT COOPERATION TREATY

PCT

Translation INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference FS04-412PCT	FOR FURTHER ACTION	See Form PCT/IPEA/416						
International application No.	International filing date (day/month/year)	Priority date (day/month/year)						
PCT/JP2004/004590	31.03.2004	10.04.2003						
International Patent Classification (IPC) or national classification and IPC								
Applicant								
JAPAN SCIENCE AND TECHNOLOGY AGENCY								
This report is the international prelin under Article 35 and transmitted to th	1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.							
2. This REPORT consists of a total of _	3 sheets, includi	ng this cover sheet.						
3. This report is also accompanied by Al	NNEXES, comprising:							
a. (sent to the applicant and	to the International Bureau) a total of 7	sheets, as follows:						
sheets of the descrip sheets containing red Instructions).	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative							
sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.								
	Bureau only) a total of (indicate type and numb	on of dodges in soming(s))						
(sen to the International)	Bureau only) a total of (moleate type and numb	er of electronic carrier(s))						
related thereto, in computer	, containing a sequence listing and/or tables							
Section 802 of the Administ	related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).							
4. This report contains indications relati	ng to the following items:							
Box No. I Basis of the	Box No. I Basis of the report							
Box No. II Priority								
Box No. III Non-establi	shment of opinion with regard to novelty, inve	ntive step and industrial applicability						
Box No. IV Lack of uni								
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement							
Box No. VI Certain doc	Box No. VI Certain documents cited							
Box No. VII Certain defe	cts in the international application							
Box No. VIII Certain obs	Box No. VIII Certain observations on the international application							
Date of submission of the demand	Date of completion of	this report						
		•						
Name and mailing address of the IPEA/JP	Authorized officer	Authorized officer						
Facsimile No.	Telephone No.	Telephone No.						

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2004/004590

Box	No. I	Basis of the report				
1.		regard to the language, this report is based on the internation attended under this item.	nal application in the language in	which it was filed, unless otherwise		
	This report is based on translations from the original language into the following language which is the language of a translation furnished for the purposes of:					
		international search (Rule 12.3 and 23.1(b))				
		publication of the international application (Rule 12.4)			
		international preliminary examination (Rule 55.2 and/	or 55.3)			
2.	With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report): the international application as originally filed/furnished the description:					
				as originally filed/furnished		
			received by this Authority on			
		pages*		13.10.2004		
	\square		. Teceived by this Authority on			
		the claims:				
		nos. <u>2-5</u>		as originally filed/furnished		
		nos.*		er with any statement) under Article 19		
		nos.* 1	•	13.10.2004		
		nos.*	received by this Authority on			
	M	the drawings:				
		sheets 1-4		as originally filed/furnished		
		sheets*	received by this Authority on			
	_	sheets*	received by this Authority on			
	Ш	a sequence listing and/or any related table(s) - see Supplement	ental Box Relating to Sequence I	isting.		
3.		The amendments have resulted in the cancellation of:				
		the description, pages				
		the claims, nos.				
		the drawings, sheets/figs				
		the sequence listing (specify):				
		any table(s) related to sequence listing (specify):				
4.	\boxtimes	This report has been established as if (some of) the amend they have been considered to go beyond the disclosure as fi				
		the description, pages 4,4/1,5,5/1				
		the claims, nos. 4				
		the drawings, sheets/figs 5				
		any table(s) related to sequence listing (specify):				
*	If ite	em 4 applies, some or all of those sheets may be marked "sup				

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/JP2004/004590

Box			icle 35(2) with regard to novelty, inventive porting such statement	step or industrial applicability;
1.	Statement			
	Novelty (N)	Claims	1-5	YES
		Claims		NO
	Inventive step (IS)	Claims		YES
		Claims	1-5	NO
	Industrial applicability	(IA) Claims	1-5	YES
		Claims		NO

2. Citations and explanations (Rule 70.7)

- Document 1: JP 2000-249768 A (Hamamatsu Photonics Kabushiki Kaisha), 14 September 2000, paragraph [0046] and [0047]; fig. 1 to 14
- Document 2: Hamamatsu Photonics K.K., Microchannel Plate
 Photomultiplier Tube (MCP-PMTs) R3809U-50
 Series, 2002

Claims 1 to 5

Document 1 sets forth a gamma ray detector wherein a CsBr crystal having an atomic ratio of Cs to Br of 1:1 as a scintillator, and a photomultiplier tube is used to receive light from the scintillator.

In addition, document 2 sets forth a photomultiplier tube built into a MCP.

It would be obvious to a person skilled in the art to employ the photomultiplier tube set forth in document 2 as the photomultiplier tube set forth in document 1.

Therefore the invention set forth in claims 1 to 5 does not involve an inventive step in the light of documents 1 and 2.